Description of a new species of the genus *Metula* H. & A. Adams, 1853 (Gastropoda, Prosobranchia, Buccinidae) from the Western Indian Ocean.

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ABSTRACT. Since its origin the systematic arrangement of the genus *Metula* has been rather controversial; this problem has been settled only recently, by means of anatomical studies, but there are still some disagreements among taxonomists. An unknown buccinid belonging to this genus is here described and is given the name *Metula somalica*.

INTRODUCTION.

The taxonomy of the name Metula and other correlated genera has been clarified only lately. after an old controversy between Ponder and Cernohorsky. PONDER (1968, 1973) included these genera in the Colubrariidae, separating them from Buccinidae by anatomical differences. CERNOHORSKY (1971) recognized some affinities between the radular apparatus of Ratifusus and Iredalula and that of Buccinidae, and Suggested their inclusion in the Pisaniinae subfamily. This theory has been followed by most taxonomists, BEU & MAXWELL (1987) also put the taxon Metula in the Pisaniinae. BOUCHET (1988) represents for the first time the radular structure of a Metula species, comparing it with that of Pisania striata (Gmelin, 1791); owing to the remarkable differences between them, he states that more work shall be necessary to establish the true relationship between the two genera, moreover he comes to the conclusion that the Atlantic buccinid genus Bartschia Rehder, 1943, on account of its similar characters, should be changed into a subgenus of Metula. (1943)described REHDER the genus Antemetula, with Buccinum metula Hinds, 1844 as type species, distinguishing it from Metula; CERNOHORSKY (1971) synonymized Antemetula with Acamptochetus Cossman, 1901, and a few years later KILBURN (1975) relegated both Acamptochetus and Antemetula, with its subgenus Colubrarina Kuroda & Habe, 1971, to the synonymy of Metula. In addition to these debates of anatomical and morphological nature, there has long been nomenclature confusion concerning the type-species Buccinum clathratum Adams & Reeve, 1850; this was originally described from South Africa, KNUDSEN (1956) figured it as a West-African species (Spanish Guinea), KILBURN (1975) redenominated it as M. knudseni, being the former taxon junior synonym of B. clathratum Kiener, 1834; lately EMERSON (1986) settled this question by giving the name M. clathrata to a West-American species, and M. clathrata sensu Knudsen (= M.knudseni Kilburn) has been confirmed as an undescribed species and named by Bouchet (1988) M. africana.

Metula is typically a deep water genus, and a few new species have been trawled in the last few years along the East African coast of the Indian Ocean: M. boswellae Kilburn, 1975, M. crosnieri Bouchet, 1988, M. bozzettii Parth, 1989, M. angioyorum Parth, 1992, and M. chetyzecchiae Bozzetti, 1992; KILBURN (1975) represented an unknown species trawled off Durban, which actually can be identified as a large, worn specimen of *M. chetyzecchiae*.

Metula somalica n. sp.

Description

Shell solid, fusiform, spire high and sharp, upper part orthoconic, lower cyrtoconic, protoconch missing, teleoconch consisting of six convex whorls. Suture incised, aperture high, about half total length, narrow, almond-shaped, siphonal canal short, slightly bent to the left, anal sulcus deep. External lip thickened by a varix, with a sharp edge, internal side smooth or weakly wrinkled. Parietal callus normally developed; sculpture finely beaded, consisting of dense spiral threads and weaker axial ribs. Spiral sculpture stronger on anterior end. About sixty spiral threads on the body whorl and siphonal canal, twenty-four on the penultimate whorl, twenty on the preceeding one; scupture of early whorls hardly visible due to erosion. Ground colour beige-cream, whitish at the top of the spire, with bands of large, axially oblong, reddishbrown blotches. Distribution of bands as follows : none on the early three whorls, one subsuturally positioned and one half-covered by the subsequent whorl in the fourth whorl, two in the penultimate whorl and three in the body whorl. Corresponding blotches of two close bands are often joined by finer flammules of the same colour. Lowest band on the body whorl half wide compared to the upper ones. In the siphonal area a darker band, continuous on dorsum side, interrupted on aperture side. Peristome whitish or vellowish. inside of the mouth cream-coloured.

Discussion

Metula somalica, superficially resembles a dwarf *M. boswellae*, being three times shorter, but comparison should be made with similar sized species of Indo - Pacific distribution; the new species, compared with its closest ally, *M. daphnelloides* Melvill & Standen, 1903, has a

lower spire, a stronger outer lip, a deeper anal sulcus, more inflated whorls, siphonal canal narrower and shorter, a weaker parietal callus and a larger size. *M. hindsii*, H. & A. Adams, 1858, has a slender spire, a narrower mouth and less inflated whorls. *M. metula* (Hinds, 1844) has a slender spire and a stronger axial sculpture. Moreover, an important and distinctive character is the lack of teeth on the outer lip in *M. somalica*.

Type locality

All specimens have been trawled off Ras Hafun, Northeastern Somalia, on sandy bottoms at 200-250 metres depth.

Type material

Holotype, 28.2mm,IRSBN, Bruxelles,no. 27954/458; paratype 1, 24.9mm, Natal Museum, Pietermaritzburg, no. L236/T870; paratype 2, 25.8mm, author's coll., Milan;paratype 3, 24.4mm, author's coll.; paratype 4, 26.8mm, Brink coll., Durban; paratype 5, 26.mm, Inst. of Mal., Tokyo, no. IMT-92-49; paratype 6, 23.3mm, author's coll.

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REFERENCES.

BEU, A.G. and P.A. MAXWELL. 1987. A revision of the fossil and living gastropods related to *Plesiotriton* Fischer, 1884 (Family Cancellariidae, Subfamily Plesiotritoninae n. subfam.) with an appendix: genera of Buccinidae Pisaniinae related to *Colubraria* Schumacher, 1817. *New Zealand Geological Survey Paleontological Bulletin* 54:1-140.

BOUCHET,P., 1988. Two New Species of *Metula* (Gastropoda: Buccinidae) with a Description of the Radula of the Genus. *The Nautilus* 102(4): 149-153.

CERNOHORSKY,W.O.,1971. Indo-Pacific Pisaniinae (Mollusca: Gastropoda) and related buccinid genera. *Records of the Auckland Institute and Museum* 8: 137-167.

EMERSON, W.K., 1986. On the type species of *Metula* H. & A. Adams, 1853: *Buccinum clathratum* A. Adams & Reeve, 1850. *The Nautilus* 100(1): 27-30.

KILBURN,R.N., 1975. Taxonomic notes on South African marine Mollusca (5): including description of new taxa of Rissoidae, Cerithiidae, Tonnidae, Cassididae, Buccinidae, Fasciolariidae, Turbinellidae, Buccinidae, Architectonicidae, Epitoniidae, Limidae and Thraciidae. *Annals of the Natal Museum* 22(2): 592-595, pl.10. KNUDSEN, J., 1956. Marine prosobranchs of tropical West Africa (Stenoglossa). *Atlantide Report* 4: 7-110.

PONDER, W., 1968. Anatomical notes on two species of the Colubrariidae. *Transactions of the Royal Society of New Zealand*, Zoology 10(24): 217-233.

PONDER, W., 1973. The origin and evolution of the Neogastropoda. *Malacologia* 12(2): 295-338.

REHDER, H.A., 1943. New marine mollusks from the Antillean region. *Proceedings of U.S. National Museum* 93(3161): 187-203.



Metula somalica. Fig. 1 holotype, fig. 2 paratype 1, fig. 3 paratype 2, fig. 4 paratype 4, fig. 5 paratype 3, fig. 6 paratype 6,